

# 3.15: UTILITIES AND SERVICE SYSTEMS

## **Introduction**

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This section describes existing utilities and service systems available in and around the project area. Services discussed in this section include natural gas and electricity providers, water suppliers, wastewater and/or sewage facilities, storm drainage systems, and solid waste disposal services. This section also describes applicable policies related to utilities and service systems. Potential impacts are described and measures to mitigate any potentially significant impacts are presented.

## **Environmental Setting**

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### **REGIONAL SETTING**

#### **Gas and Electricity**

PG&E currently serves both the Butte and Colusa County portions of the project area with electricity and natural gas.

#### **Water Supply and Wastewater/Sewage Systems**

Approximately 85% of Butte County residents currently receive domestic water and/or sewer service from community systems. The use, storage, and disposal of liquid waste in Butte County are regulated by the County Health Department in cooperation with the State Water Quality Control Board (SWCQB).

The largest community sewer systems in Butte County include:

Town	Capacity	Current Use
Chico	9.0 mgd	6.0 mgd
Oroville	6.5 mgd	3.2 mgd
Gridley	1.05 mgd	0.9 mgd
Biggs	1.4 mgd	unknown

mgd = million gallons per day

Colusa County has six community water systems and 54 domestic systems registered with the County Environmental Health Department. All domestic water systems in Colusa County are supplied with groundwater from wells generally 100 to 500 ft deep, while most irrigation-systems are supplied with surface water from the Tehama-Colusa or Glenn-Colusa Canals, the Colusa Drain, or the Sacramento River.

Colusa County wastewater is treated primarily through on-site disposal and centralized disposal methods. Sixty five percent of the population in Colusa County is served by centralized / community systems. The areas served by on-site systems are generally rural or agricultural.

The largest community wastewater facilities in Colusa County include:

Town	Capacity	Current Use
Arbuckle	0.4 mgd	0.2 mgd
Colusa	1.5 –2.0 mgd	0.67 mgd
Williams	0.5 mgd	0.4 mgd

**Storm Drainage Systems**

Most of the urban areas and irrigated croplands in Butte County are protected from flooding by a complex network of gutters, ditches, and overflow channels. In Colusa County, a ditch has been built along the Colusa Trough to address flooding in this low-lying area, parallel to and several miles west of the Sacramento River. Capacity of this ditch, however, has been exceeded due to increased irrigation. Flooding is also a problem from the Colusa Drain and Sacramento River areas. Farmers who have straightened channels, leveled fields, and realigned streams have altered drainage courses across the valley. The natural drainage pattern has also been altered by road construction and by construction of canals that run perpendicular to natural drainage ways.

**Solid Waste Disposal Services**

Butte County adopted a solid waste management plan in 1975. The plan outlines a program for storage, collection, processing and disposal of all solid waste material, according to requirements of Government Code 66700 et. Seq. Several privately owned transfer stations provide storage, collection and processing of solid waste for the County. The Neal Road Landfill, with a remaining capacity of 7.1 million cubic yards (California

Integrated Waste Management Board), is the central collection and disposal site for Butte County. The County expects this site to have sufficient capacity through 2015. Solid waste produced by the project would be collected by one of three licensed haulers and transported to the Ord Ranch Road Transfer Station in Gridley. North Valley Disposal and Recycling presently provide this service at the Remote Facility Site.

In Colusa County, solid waste disposal operations are centralized at two sanitary landfills. One landfill is located south of Stonyford and the other is located on Evans Road. A 10-acre transfer station is located south of Maxwell. The Evans Road landfill was expanded to accommodate the County's projected growth beyond the year 2010. The landfill could reach capacity sooner than 2010 if the County accepts waste from other counties, experiences a great surge of industrial growth, or permits private firms from other regions to use the facility.

## **LOCAL SETTING**

### **Well Pad Site**

Electrical power to the Well Pad Site is provided via a PG&E 12kV transmission line. The overhead 12kV electric distribution line is located adjacent to the Well Pad Site. There is an electrical service panel at the water well pump at the site. There are no telephones at the site.

There are no water or wastewater treatment facilities or septic tanks at the Well Pad Site area. The 833 Canal (Main Drain) is a perennial waterway that runs in a southwesterly direction through the project study area and connects with the Cherokee Canal at a point approximately 1,200 feet north of the Well Pad Site. There are no solid waste facilities at the Well Pad Site.

### **Storage Loop Pipeline**

There is an underground telephone cable (which also serves the Remote Facility) along the south edge of West Liberty Road from the Remote Facility Site down to the Weiking property hunting lodge. There are no telephone wire or cables along the Storage Loop Pipeline beyond this point.

A 12-kV transmission line, which serves the Remote Facility, runs on the southern edge of West Liberty Road onto the Weiking property. On the Roseville property, the Storage Loop Pipeline parallels a 12kV line the entire distance across that property. A PG&E natural gas pipeline also runs through the project area along the north side of the county road right-of-way (ROW) on West Liberty Road.

The 833 Canal (also known as the Main Drain), which provides storm water drainage during the winter months, intersects the Storage Loop Pipeline twice: at points on the Loop approximately 0.8 mile from the Well Pad Site and 1.6 miles from the Well Pad Site. There are no water or wastewater treatment facilities or septic tanks in the Storage Loop Pipeline area. There are no solid waste facilities or services along the proposed route of the Storage Loop Pipeline.

### **Remote Facility Site**

Electric distribution lines are located adjacent to the Remote Facility Site and are the main source of electrical power to the Facility. In addition to PG&E's 12-in Line 167 gas line running through the Remote Facility Site, an 8-in lateral of Line 167 extends to the west along the north side of West Liberty Road. This line terminates with a service tap to the Gray Eagle Hunting Club located at the end of the road. Another lateral of Line 167 runs east from the Wild Goose Mixer Station along West Liberty Road.

During initial project development, Pacific Bell extended telephone service from Pennington Road to the Remote Facility Site. PG&E provided electrical service from its existing 12-kV line running along West Liberty Road.

There are no wastewater treatment facilities within the Remote Facility study area. There is a septic system at the site. The septic system consists of a holding tank with a capacity of 2,000 gallons, and is pumped once each month by a local sanitary waste hauler. In the past, the holding tank has never been near its capacity.

A levee forms the north side of the 833 Canal from its junction with the Cherokee Canal up to about the vicinity of the Remote Facility Site. This levee protects lands to the north from the 100-yr floodwaters and is maintained by Reclamation District 833, headquartered in Gridley. A major ditch, called the Belding Lateral Drain, crosses West Liberty Road approximately 0.5 mile east of the Remote Facility Site.

North Valley Disposal and Recycling provides solid waste collection at the Remote Facility Site. The 20 cubic yard capacity dumpster is emptied two to three times per year, representing a maximum annual production of 60 cubic yards. The hauler would not need to make additional trips to the septic holding tank. The distance from the Remote Facility to the Near Road Landfill is approximately 30 miles.

### **Line 400/401 Connection Pipeline.**

Telephone lines are located at various locations along the proposed Line 400/401 Connection Pipeline route including:

- Gridley Road
- River Road
- State Highway 45
- Delevan Road
- County Road 99
- Dirks Road

Pacific Bell has installed many of these cables underground along the road shoulder, rather than attaching them to overhead electric power poles.

PG&E also serves the Colusa County portion of the project study area, which includes the proposed Line 400/401 Connection Pipeline and Delevan Interconnect Facility, with electricity and natural gas. PG&E operates two 60-kV electric transmission lines in the project study area. One line runs along State Route 45 and the other runs parallel to and

0.5 mile east of Interstate 5. In addition, PG&E's 18-inch L172 runs generally parallel to and west of State Route 45 through the project study area.

PG&E's 12-kV electric distribution line runs along the access road to the Delevan Interconnect Facility. The Delevan Compressor Station provides compression for PG&E's 36-inch and 42-inch Line 400/401 pipelines, which serve as the backbone natural gas pipeline system for transporting gas from Canada to California markets. Two 230-kV electric transmission tower lines follow a north-south alignment along the east side of the station.

There are no water facilities, wastewater treatment facilities, or septic systems in the Colusa County portion of the project study area. Water supplies for agricultural purposes are drawn from the Sacramento River or the myriad of canals crossing through the project study area. Water used for dust control during construction would be drawn from existing canals as described in the Hydrology section. There are no storm water drainage facilities located in the Colusa County portion of the project study area, except for the flood control and management channels and levee systems discussed in the Hydrology section. There are no solid waste facilities or services along the proposed route of the Line 400/401 Connection Pipeline.

## Regulatory Setting

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### FEDERAL SETTING

There are no federal regulations that apply to potential impacts on utilities and service systems in the project area.

### STATE/REGIONAL SETTING

The project area is located within the jurisdiction of the State Water Resources Control Board (SWRCB), the California Integrated Waste Management Control Board (CIWMB), and the Central Valley Regional Water Quality Control Board (RWQCB). The SWRCB and CIWMB formulate policies and regulations pertaining to water discharge and solid waste, respectively, while the RWQCB conducts permitting and enforcement activities.

### LOCAL SETTING

The Colusa County General Plan contains the following policy relevant to potential impacts of the proposed project and project alternatives to utilities and service systems:

**FL-4.** New development should be required to mitigate its drainage impact through any of a series of measures that should be explored in a countywide drainage and flood control plan.

The Butte County General Plan contains the following policies relevant to potential impacts of the proposed project to utilities and service systems:

**2.4.d.** Require proof of adequate water supply for all new development.

**2.4.e.** Conservation of water and energy would be considered in approving plans for new development.

5.4.a. Encourage expansion of private utility systems consistent with County plans and policies.

5.8.a. Protect the public health and safety of Butte County residents and the natural environment through efficient solid and liquid waste management practices.

## Environmental Analysis

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### AREAS OF POTENTIAL ENVIRONMENTAL CONCERN

Listed below are areas of potential environmental concern that could be affected by implementation of the proposed project.

- The potential to exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board
- The potential to require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects
- The potential to require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects
- The potential to have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed
- The potential to result in a determination by all wastewater treatment providers serving the project that they have adequate capacity to accommodate the project's projected demand in addition to the provider's existing commitments
- The potential to be served by a landfill with sufficient capacity to accommodate the project's solid waste disposal needs
- The potential to comply with federal, state, and local statutes and regulations related to solid waste

### THRESHOLD OF SIGNIFICANCE

The thresholds of significance listed below are used to determine the level of impact to areas of potential environmental concern.

- **Wastewater treatment requirements exceeded.** Project-related actions that would exceed wastewater treatment requirements of the Central Valley Regional Water Quality Control Board (RWQCB), are considered to have a significant impact.
- **Construction/expansion of water or wastewater treatment facilities.** Project actions are considered to have a significant effect if they require the construction or expansion of wastewater treatment facilities or domestic wells or septic systems within the vicinity of the Wild Goose facilities.
- **Construction/expansion of storm drainage facilities.** If the project actions necessitate the construction of new storm drainage facilities or the expansion or alteration of existing storm drainage facilities, then they are considered to have a significant effect on this utility.
- **Sufficient water supplies.** As additional water required for the project would be drawn from local drainage canals, increases in water requirements would constitute a significant

effect if they surpass current provisions for water supplies as permitted by the local irrigation and reclamation districts.

- **Adequate capacity for wastewater treatment.** If wastewater generated by the project exceeds capacities of Butte and Colusa County wastewater treatment facilities or of the on-site septic tank and pumper service, then the project would have a significant impact.
- **Adequate capacity for solid waste disposal.** If the County landfills are unable to accept the amount of solid waste generated by the project due to lack of permitted capacity, then the project would have a significant impact.
- **Compliance with statutes and regulations related to solid waste.** Project actions would have a significant effect on solid waste services if they do not comply with SWQCB and CIWMB regulations for solid waste disposal, or the Butte and Colusa County Solid Waste Management Plans.

## IMPACT DISCUSSION

Project construction could inadvertently disrupt utility services present in the project area, resulting in temporary service interruptions. Although an annoyance to the affected customers, temporary or accidental service interruptions would not be considered a significant impact. WGSi is a member of the Utility Service Alert network. Existing utilities in all construction areas would be identified by the owner of the utility prior to construction for the purpose of reducing the potential for accidental encounter of buried utility systems.

### Impact 3.15-1: Potential to Exceed Wastewater Treatment Requirements

WGSi would comply with requirements of the RWQCB General Permit for Dewatering and Other Low Threat Discharges to Surface Water. Temporary accommodations for sewage would be provided during construction. Current septic tank capacity would be sufficient during expanded operation.

**Well Pad Site.** During construction, sewage from trailers would be collected in plastic tanks and pumped by a local septic tank pumper service. Fluids used in the drilling operation would be contained in rig tanks. Fluid circulation systems would be closed, resulting in no discharges.

During operation, small amounts of water from deep saline aquifers connected to the storage reservoir may also be withdrawn when natural gas is withdrawn from the reservoir. This water, called “produced water,” is high in mineral salt concentration (approximately equivalent to sea water) and must be separated and removed from the gas stream with the use of an inlet separator and a dehydration system, as currently practiced. There is an existing 3-inch diameter produced water pipeline (parallel to the existing Storage Loop Pipeline) that conveys produced water from the Well Pad Site to the Remote Facility Site for processing and disposal. Produced water would be temporarily stored at the Remote Facility Site; up to six additional produced-water storage tanks with a total capacity of 200,000 gallons would be added at the RFS to accommodate additional produced water. The produced water would later be hauled by a licensed hauler for off-site disposal. The existing L4 zone has produced very little water, and it is anticipated that the three additional zones would also produce little water. If excessive amounts of produced water are generated, then WGSi would drill a deep injection well to accommodate the water. The produced water deep injection well was approved by

DOGGR and the CPUC during initial project development. Less than significant impacts are anticipated from production of wastewater at the **Well Pad Site**.

**Storage Loop Pipeline.** During construction, the pipeline trench and foundation excavations would require dewatering. As discussed in Section 3.8, Hydrology, hydrostatic testing would require filling the pipeline with water, increasing the pressure to a minimum of 125% of the maximum operating pressure, and holding the pressure for a period of time in accordance with pipeline safety regulations and codes. Following testing, the pipeline would be flushed to remove dirt and other debris. The water would be tested for contaminants and, if clean, released back into the canals or adjacent wetland areas. Discharges from dewatering and hydrostatic testing would be in compliance with the RWQCB General Permit for Dewatering and Other Low Threat Discharges to Surface Water.

Water produced during hydrostatic testing typically does not contain contaminants and usually meets water quality standards for release. In the event that water produced from hydrostatic testing is unfit for discharge into local canals or wetlands, the water would be pumped into tanker trucks and transported off-site to a disposal/treatment facility appropriate for the types of pollutants found in the water. The discharge of the hydrostatic testing water would not exceed wastewater treatment requirements and would not cause a significant effect.

**Remote Facility.** Construction workers would use portable toilets for sanitary needs. Because the Remote Facility septic system has sufficient capacity for increased use anticipated during operations, disposal of additional sewage would not be subject to review by the Central Valley RWQCB. Expanded operations are not expected to exceed septic system capacity.

Produced water would be temporarily stored at the Remote Facility Site. Up to six additional produced water storage tanks with a total capacity of 200,000 gallons would be added at the RFS to accommodate additional produced water.

**Line 400/401 Connection Pipeline.** The contractors may have their office trailers at the Delevan Interconnect Facility, and would use portable toilets for sanitary needs at construction sites along the pipeline and Delevan Interconnect Facility.

Dewatering of trenches and hydrostatic testing of pipelines would also be performed during construction and installation of the Line 400/401 Connection Pipeline. Discharge of produced water would be in compliance with the RWQCB General Permit for Dewatering and Other Low Threat Discharges to Surface Water. Wastewater would not be produced along the Line 400/401 Connection Pipeline or at the Delevan Interconnect Facility study area during operation of the project, except during any possible future hydrostatic testing, which would be carried out in the same manner as described above.

**Level of Significance Without Mitigation.** Impacts associated with wastewater treatment requirements are considered to be less than significant because construction and operation of the project would not exceed wastewater treatment requirements.

**Mitigation Measures.** No mitigation is required.



**Impact 3.15-2. Potential for Construction/Expansion of Water or Wastewater Treatment Facilities**

No water, wastewater treatment, or septic systems would be constructed or expanded as part of the proposed project. Water used during construction would be sourced from local drainage canals and would not require the construction of domestic wells or other water facilities during construction. Additional water facilities would not be required during expanded operations. In some cases, large amounts of wastewater may be produced during construction (from hydrostatic testing). In the event that water produced from hydrostatic testing is unfit for discharge into local canals or wetlands, the water would be pumped into tanker trucks and transported off-site to a disposal/treatment facility appropriate for the types of pollutants found in the water. Production of wastewater would not require expansion of existing facilities. Current water facilities and septic systems would be adequate for the expanded operations phase of the proposed project.

**Well Pad Site.** Construction or expansion of water or wastewater treatment facilities are not proposed for the Well Pad Site and are not required for construction or expanded operations. Produced water generated during expanded operations is expected to be minimal and is not expected to require the expansion of existing facilities. If excessive amounts of water are produced, then WGS Inc. would drill a produced water deep injection well as a means of disposal. The injection well was approved by DOGGR and the CPUC during initial project development and is not subject to analysis in this EIR.

**Storage Loop Pipeline.** Large amounts of wastewater may be produced from hydrostatic testing. In the event that water produced from hydrostatic testing is unfit for discharge into local canals, the water would be pumped into tanker trucks and transported off-site to a disposal/treatment facility appropriate for the types of pollutants found in the water. No adverse impacts are anticipated from this testing. Construction and operations would not require expansion of water or wastewater treatment facilities.

**Remote Facility.** Construction of new domestic wells or expansion of the existing well in the Remote Facility would not be required during construction or operations. The existing domestic well and septic system would be adequate to serve the proposed expansion. No impacts are anticipated.

**Line 400/401 Connection Pipeline.** The proposed project would not require construction or expansion of water or wastewater treatment facilities during construction or operations along the Line 400/401 Connection Pipeline or at the Delevan Interconnect Facility. Hydrostatic testing during construction along the Line 400/401 Connection Pipeline may result in the generation of large amounts of water. In the event that water produced from hydrostatic testing is unfit for discharge into local canals or wetlands, the water would be pumped into tanker trucks and transported off-site to a disposal/treatment facility appropriate for the types of pollutants found in the water. No adverse impacts are anticipated from this testing. Construction and operations would not require expansion of water or wastewater treatment facilities.

**Level of Significance Without Mitigation.** The proposed project would not require construction or expansion of water or wastewater treatment facilities. No impact is anticipated.

**Mitigation Measures.** No mitigation is required.

**Impact 3.15-3. Potential for Construction/Expansion of Storm Drainage Facilities**

As discussed in Section 3.6, Geology and Section 3.8, Hydrology, WGSi has proposed several mitigation measures as part of the project to control runoff during construction and operation. The proposed project would not result in runoff levels that might exceed existing drainage canal and ditch system capacity in the project area. For all sites, the following measure is proposed as part of the project:

**WGSi Measure 3.15-1.** Following pipeline construction, all disturbed surfaces would be returned to their pre-construction elevation and slope. Above-ground facilities would be covered with gravel to allow storm water infiltration and directed flow of runoff to existing drainage ways.

**Well Pad Site.** The Giant Garter Snake Habitat Enhancement Plan (see 3.04 Biology) is proposed as part of the project to mitigate potential effects to the Giant Garter Snake Habitat. Implementation of this plan would include selective excavation by scrapers along pre-determined alignments to create channels and gently sloping banks that would be subject to regulated water introduction for giant garter snake habitat. The plan would result in additional meandering channels that would hold slow-moving water through the summer. Because these modifications are intended to increase the functions and values of the wetlands by holding slow-moving water during the summer, this impact is considered less than significant.

The Well Pad Site expansion would result in extension of the berm into the 100-yr flood zone. The Well Pad Site is located on the fringe of the floodway; it is not expected that the expansion would result in impediment or redirection of flood flows. The final grade of the fill and the gravel surface would be sloped to drain according to a grading and drainage plan. All facilities to be installed at the Well Pad Site would be designed to withstand periodic inundation.

Because the drainage facilities proposed as part of the Well Pad Site expansion follow current grading and drainage patterns, potential impacts would be less than significant.

**Storage Loop Pipeline.** Light grading or gravelling and culvert repair or replacement may be required to prepare access roads for construction. Roads potentially affected would include existing paved, graveled, and dirt public and private roads in the surrounding agricultural areas. Access roads for the Storage Loop Pipeline construction area include:

- The ROW from the end of West Liberty Road, along farm roads from the end of Hatch Road or from the Gridley Road through the Pipers Patch Club
- Existing roads through the Gray Lodge, and through the Wild Goose Club
- Along the east side of the Cherokee Canal past the Spring Meadows Duck Club to the ROW

A portion of the farm access road that passes through the Pipers Patch Club runs along the top of a levee face. Placement of temporary fill may be required along this portion of the road to provide a ramp for construction equipment to safely access the ROW below. The following measure is proposed by WGSi to reduce potential impacts associated with creation of this access ramp:

**WGS Measure 3.15-2.** The temporary construction access ramps installed on the levee face would be removed following construction and the levee face would be returned to its preconstruction configuration and appearance.

In order to maintain irrigation flows across the ROW, rigid culverts may be installed across the full width of the ROW as part of the preconstruction work. Sand bags would be used to seal around the ends of the culverts, thereby isolating the flowing water from the work area while the crossing is trenched. Because all drainage-related activities in the Storage Loop Pipeline area are temporary, effects of these activities are considered to be less than significant.

**Remote Facility Site.** To isolate the working strip from flooding in adjacent fields, temporary dikes would need to be installed following harvest in the fall or during spring field preparation. Construction of temporary dikes is further discussed in 3.08 Hydrology. The following measure is proposed as part of the project to minimize potential impacts to drainage systems in the area:

**WGS Measure 3.15-3.** Following construction, agricultural fields would be surveyed and regraded to their original elevation where needed and all rice field dikes and check boxes would be repaired and/or replaced.

Elevation surveys would be conducted following construction to ensure that the field gradient and irrigation flows are not adversely affected by installation of the temporary dikes. Finish grading would be provided if necessary. The installation of temporary dikes would not result in a significant impact.

Expansion of the Remote Facility Site would disturb the southern portion of two existing rice fields. Rice field drainage systems would be relocated as required during construction in these areas. Additional storm drainage facilities may be constructed. Effects of relocating rice field drainage systems are discussed further in Section 3.8, Hydrology. Expanded operation at the Remote Facility would not result in construction or expansion of storm drainage facilities.

**Line 400/401 Connection Pipeline.** Light grading or gravelling and culvert repair or replacement may be required to prepare access roads for construction equipment. Roads potentially affected include existing paved, graveled, and dirt public and private roads in the surrounding agricultural areas. WGS and the contractor would jointly prepare a construction access plan for the Line 400/401 Connection Pipeline. This access plan would be included in the Transportation Management Plan, which would be submitted for lead agency review and approval.

The finished grade at the Delevan Interconnect Facility would be covered with gravel, which would provide an all-weather surface for operations access while allowing stormwater infiltration into the soil. No storm water facilities would be constructed at the Delevan Interconnect Facility.

**Level of Significance Without Mitigation.** The construction of new canals and other drainage facilities would be performed by WGS in accordance with existing grading and

drainage plans (see also 3.08 Hydrology). With implementation of these measures, potential impacts would be reduced to a less than significant level.

**Mitigation Measures.** The above measures are proposed by WGSJ as conditions of the project. With incorporation of these measures, no further mitigation is required.

**Impact 3.15-4. Sufficient Water Supply**

Approximately two million gallons of water would be drawn from local drainage canals and used for dust control during grading activities at the Delevan Interconnect Facility, Remote Facility Site, and Well Pad Site, and during construction of the pipelines. Construction water would be obtained through contract arrangements with local water suppliers, irrigation and drainage districts, or hunting clubs that have water rights. During initial project development, the quantities of water used were considered insignificant by local irrigation and reclamation districts, and no fees were charged. If required, water requirements will be purchased from the districts' available allocations. Bottled drinking water would be provided during construction.

During operations, water would be required for sanitary needs, landscaping and irrigation, and other site maintenance. Current private well supplies would be sufficient for water demand during expanded operations

**Well Pad Site.** During construction at the Well Pad Site, water would be sourced with the permission of local irrigation and reclamation districts. If necessary, water requirements will be purchased from the districts' available allocations. The Well Pad Site would not require domestic water use during operations.

**Storage Loop Pipeline.** During construction at the Storage Loop Pipeline, water would be drawn with the permission of local irrigation and reclamation districts. If necessary, water requirements will be purchased from the districts' available allocations. Storage Loop Pipeline operation would not require domestic water sources.

**Remote Facility.** During construction at the Storage Loop Pipeline, water would be withdrawn with the permission of local irrigation and reclamation districts. If necessary, water requirements will be purchased from the districts' available allocations. Water demands during operations would be minimal, and only required at the Remote Facility Site where the existing domestic well would also serve the proposed expansion.

**Line 400/401 Connection Pipeline.** During construction along the Line 400/401 Connection Pipeline, water would be drawn from local channels with the permission of local irrigation and reclamation districts. If necessary, water requirements will be purchased from the districts' available allocations. The Line 400/401 Connection Pipeline and Delevan Interconnect Facility would not require domestic water use during operation.

**Level of Significance Without Mitigation.** Impacts to water supply would be less than significant.

**Mitigation Measures.** No mitigation is required.

**Impact 3.15-5. Adequate wastewater treatment, septic system, and pumper and hauler service capacity**

Roughly two million gallons of wastewater may be produced during construction during hydrostatic testing. If not suitable for discharge into local canals or wetlands, this water would be pumped into tanker trucks and transported off-site to a disposal/treatment facility appropriate for the types of pollutants found in the water. Remaining capacity at wastewater treatment facilities within Butte and Colusa Counties would be adequate to accommodate this produced wastewater.

Sewage would be stored in plastic tanks and portable toilets throughout construction and would be collected by a local pumper service. The remote facility is the only project component that would require a septic system during operations. The existing septic system at the remote facility has sufficient capacity to accommodate increased use during expanded operations.

**Well Pad Site.** Wastewater would not be produced during construction or operations at the Well Pad Site. A local pumper service would collect sewage during construction. A septic system and pumper service would not be necessary during expanded operations at the site.

Produced water that would be generated during expanded operation is anticipated to be minimal (current water produces by the L4 zone has been minimal). If excessive water were produced, then WGSi would drill a deep injection well as a means to dispose of the water. The deep injection well was approved by DOGGR and the CPUC during initial project development. WGSi would have adequate capacity to accommodate excessive produced water if it is generated.

**Storage Loop Pipeline.** Release of hydrostatic test water (as described under Impact 3.15-1) would be in compliance with the General Permit for Dewatering and Other Low Threat Discharges to Surface Water. If the test water contains pollutants whose discharge would violate the terms of the General Permit, this water would be pumped into tanker trucks and transported off-site to a disposal/treatment facility appropriate for the types of pollutants found in the water. Remaining capacity at wastewater treatment facilities within Butte and Colusa Counties would be adequate to accommodate this produced wastewater. Wastewater would not be produced during operation of the Storage Loop Pipeline. Less than significant impacts are anticipated from construction and operation of the Storage Loop Pipeline.

A local pumper service would collect sewage during construction. A septic system and pumper service would not be necessary during operations of the pipeline.

**Remote Facility Site.** Construction crews would use portable toilets for sanitary needs during construction at the Remote Facility Site. Septic system capacity would be adequate for expanded operations at the site. No impacts to septic systems and services are expected at the Remote Facility Site.

**Line 400/401 Connection Pipeline.** As with construction of the Storage Loop Pipeline, large amounts of wastewater may be produced from hydrostatic testing along the Line 400/401 Connection Pipeline. This wastewater would be hauled to treatment facilities if it contains pollutants that would violate terms of the General Permit for Dewatering and Other Low Threat Discharges to Surface Water (this wastewater would be discharged into

local canals or wetlands if the it meets requirements of the General Permit). Remaining capacity at wastewater treatment facilities within Butte and Colusa Counties would be adequate to accommodate this produced wastewater. No other wastewater would be produced from operation of the Line 400/401 Connection Pipeline or its Delevan Interconnect Facility. Less than significant impacts are anticipated from construction and operation of the Line 400/401 Connection Pipeline or its Delevan Interconnect Facility.

The contractors may have their office trailers at this site, and would use portable toilets for sanitary needs at pipeline and Delevan Interconnect Facility construction sites. A septic system and pumper service would not be necessary during operations of the Line 400/401 Connection Pipeline or the Delevan Interconnect Facility.

**Level of Significance Without Mitigation.** Because remaining capacity at wastewater treatment facilities within Butte and Colusa Counties would be adequate to accommodate wastewater, which may possibly be generated during construction, less than significant impacts are anticipated on wastewater treatment capacity. No impacts on septic system and pumper and hauler service capacity are anticipated.

**Mitigation Measures.** WGSi has proposed the measure indicated below for mitigating impacts on wastewater treatment, septic system, and pumper and hauler service capacity.

**Mitigation Measure 3.15-1.** WGSi shall coordinate with local (within Colusa and Butte County) wastewater treatment facilities to ensure adequate treatment capacity would be provided for the project if necessary. This would occur if the water produced from hydrostatic testing does not meet RWQCB General Permit standards for Dewatering and Other Low Threat Discharge to Surface Water.

**Level of Significance After Mitigation.** With implementation of the above mitigation measure, potential impacts would be less than significant on wastewater treatment capacity. No impacts on septic system and pumper and hauler service capacity are anticipated.

#### **Impact 3.15-6. Adequate Capacity for Solid Waste Disposal**

Approximately 200 lb of nonhazardous waste would be generated each week during construction. A licensed solid waste disposal company would collect all wastes. North Valley Disposal and Recycling presently provides this service for WGSi. Current provisions for solid waste disposal would be adequate during expanded operations.

**Well Pad Site.** The licensed hauler would provide off-site disposal of drilling mud solids, and this material would be disposed of at an approved landfill disposal site. Butte County has indicated that they have sufficient permitted landfill capacity for the foreseeable future; consequently, no impacts would result from construction or operations at the Well Pad Site.

**Storage Loop Pipeline.** Collection and disposal of solid waste generated by the construction of the Line 400/401 Connection Pipeline would be provided by North Valley Disposal and Recycling. Solid waste would not be generated during operation of the pipeline. No impacts to solid waste disposal capacity are expected to result from the construction or operation of the Storage Loop Pipeline.

**Remote Facility Site.** Minimal amounts of solid waste would be generated during operations at the Remote Facility Site. Butte County has indicated that they have sufficient permitted landfill capacity for the foreseeable future; consequently, no impacts would result from construction or operations at the Remote Facility Site.

**Line 400/401 Connection Pipeline.** Collection and disposal of solid waste generated by the construction of the Line 400/401 Connection Pipeline would be provided by North Valley Disposal and Recycling. Solid waste would not be generated during operation of the pipeline. No solid waste would be generated at the main line block valve lot(s) or the Delevan Interconnect Facility during operation. Colusa County has indicated that they have sufficient permitted landfill capacity for the foreseeable future. No impacts would result from construction or operation along the Line 400/401 Connection Pipeline.

**Level of Significance Without Mitigation.** No impacts to solid waste disposal capacity are expected to result from the proposed project. Local facilities have adequate capacity for solid waste produced during construction and operation of the proposed facilities.

**Mitigation Measures.** No mitigation is required.

#### **Impact 3.15-7. Compliance with solid waste regulations and statutes**

It is expected that there would be sufficient landfill capacity in both Butte and Colusa Counties to accommodate waste generated by the proposed construction and expansion of the project.

**Well Pad Site.** Disposal of solid waste from construction and expanded operation at the Well Pad Site would be minimal and would not cause the permitted capacity at the Near Road Landfill in Butte County to be exceeded substantially earlier than anticipated.

**Storage Loop Pipeline.** Disposal of solid waste from construction and expanded operation at the Loop Pipeline would be minimal and would not cause the permitted capacity at the Near Road Landfill in Butte County to be exceeded substantially earlier than anticipated.

**Remote Facility.** Disposal of solid waste from construction and expanded operation at the Remote Facility would be minimal and would not cause the permitted capacity at the Near Road Landfill in Butte County to be exceeded substantially earlier than anticipated.

**Line 400/401 Connection Pipeline.** Disposal of solid waste from construction at the Remote Facility and Delevan Interconnect Facility would be minimal and would not cause the permitted capacity of local landfills to be exceeded substantially earlier than anticipated. Solid waste would not be generated from these sites during their operation.

**Level of Significance Without Mitigation.** The proposed project would be in compliance with solid waste regulations and statutes. Solid waste disposal needs would be minimal and would not cause the permitted capacity at local landfills to be exceeded substantially earlier than anticipated.

**Mitigation Measures.** No mitigation is required.

